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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,675	04/16/2004	Young-Chol Lee	Q80118	8648

23373 7590 05/08/2006

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EXAMINER

BLACKMAN, ROCHELLE ANN J

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,675

Applicant(s)

LEE, YOUNG-CHOL

Examiner

Rochelle Blackman

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-7 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 8-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-7, and 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato (U.S. Patent Application Publication No. 2003/0086066).

Regarding claim 1, Kato discloses an illumination unit for a projection image display (see FIGS. 1-16), the illumination unit comprising: a light source (for example see 2 of FIGS. 8, 10-13, and 16); an integrator (for example, see 22 of FIGS. 8-14 and 16), which converts light emitted from the light source to have uniform optical intensity; and an aspect ratio conversion unit (for example, see 19 and 23 of FIGS. 8-14 and 16), which transmits light emitted from the integrator that does not correspond to an aspect

Art Unit: 2851

ratio of image information back to the integrator, and converts and emits incident light to correspond to the aspect ratio of the image information (see pg. 8, paragraph [0102]).

Regarding claims 5 and 11, Kato discloses wherein the integrator is a transparent rod formed of a transparent material (see pg. 8, paragraph [0101], lines 7-11).

Regarding claims 6 and 12, Kato discloses wherein the integrator is a hollow-shaped light tunnel having internal reflective surfaces (see pg. 2, paragraph [0024] and pg. 12, paragraph [0132]).

Regarding claim 7, Kato discloses a projection image display (for example, see 36 of FIG. 16) comprising an illumination unit (see 37 of FIG. 16), an optical modulator (see 6 of FIG. 16) which modulates light emitted from the illumination unit according to image data, and a projection optical system (see 42 of FIG. 16) which enlarges and projects light emitted from the optical modulator, wherein the illumination unit comprises: a light source (see 2 of FIG. 16); an integrator (see 22 of FIG. 16), which converts light emitted from the light source to have uniform optical intensity; and an aspect ratio conversion unit (see 19 and 23 of FIGS. 8-14 and 16), which transmits light emitted from the integrator that does not correspond to an aspect ratio of image information back to the integrator, and converts and emits incident light to correspond to the aspect ratio of the image information (see pg. 8, paragraph [0102]).

Regarding claim 13, Kato discloses wherein the optical modulator comprises at least one of a reflection type optical modulator (see pg. 12, paragraph [0133], lines 1-6).

Regarding claim 14, Kato discloses wherein the optical modulator comprises at least one of a transmission type optical modulator (see 6 of FIG. 16 and see pg. 12, paragraph [01333], lines 1-6).

Allowable Subject Matter

1. Claims 2-4 and 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
2. The following is a statement of reasons for the indication of allowable subject matter:

Claims 2-4 and 8-10 have been found to be allowable because the prior art of record either alone or in combination neither discloses nor makes obvious the illumination unit comprising the particular feature a driving unit which drives the slit member, in combination with the other particular combination of features recited in claim 2 or 8, further in combination with particular combination of features recited in claim 1 or 7.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (571) 272-2113. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Rochelle Blackman', followed by a long horizontal line extending to the right.

Rochelle Blackman
Patent Examiner